

A Work Project, presented as part of the requirements for the Award of a Master Degree
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IMPLEMENTATION OF A BALANCED SCORECARD IN *IMPRENSA NACIONAL -
CASA DA MOEDA*

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LIST OF ABBREVIATURES:

BSC: BALANCED SCORECARD

DCM: COMMERCIAL AND MARKETING DIRECTION

DCP: PROCUREMENT DIRECTION

DPC: PLANNING AND MANAGEMENT DIRECTION

DPI: PORTFOLIO AND INVESTMENT DIRECTION

INCM: IMPRENSA NACIONAL – CASA DA MOEDA

KPIs: KEY PERFORMANCE INDICATORS

WP: WORK PROJECT

SWOT: STRENGTHS, WEAKNESSES, OPPORTUNITIES, THREATS

ABSTRACT

The present Work Project (WP), written in the form of an Interventionist Research, aims to build a Balanced Scorecard (BSC), specifically for the Planning and Management Direction of *Imprensa Nacional - Casa da Moeda* (INCM). The purpose is to focus on the all company, to identify its main features in order to design the BSC to comply with the strategic guideline given by the company: “Internationalization of INCM’s activity, enhancing the use of the installed capacity”.

Key Words: Balanced Scorecard, *Imprensa Nacional - Casa da Moeda*, Key Performance Indicators, Objectives.

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I. INTRODUCTION

This Work Project (WP) consists of a Direct Research with internship intended to handle a specific managerial problem in a state owned company called *Imprensa Nacional - Casa da Moeda* (INCM), through the proposal of a performance management tool. More, this interventionist research seeks to design a Balanced Scorecard (BSC) to provide managers at a corporate level, with a valuable set of measures, involving the company's organic units, including the Security Printing unit, the Mint unit and the Commercial and Marketing Direction, with the main purpose of complying with the strategic guideline "Internationalization of INCM's activity, enhancing the use of the installed capacity" (INCM's Strategic Plan 2017-2019). This WP is comprised of six more sections. The following section handles the literature on BSC, while Section III discloses the methodology adopted in the building process of the BSC. Section IV presents the empirical study, and section V reveals the BSC, as well as the related Strategy Map.

Section VI exposes the conclusions, limitations and recommendations. The WP ends with the bibliography in section VII.

II. LITERATURE REVIEW

During the 1980s, management accounting researchers stated the conventional control and performance measurement practices as irrelevant. Among the weaknesses, the researchers described not only the fragile link between performance measurement and strategic initiatives, but also the little emphasis on accounting reports important for internal decision making, and a failure to take into consideration technological progresses that change how manufacturing companies operate (Palmer & Spicer, 1992). The BSC, developed in the 1990s by Kaplan and Norton at the Harvard Business School, can be considered a multifaceted approach to performance measurement and management that is tied to corporate strategy (Kraus & Lind, 2010). The two creators claimed that a change from industrial to economy information happened with the introduction of new inventions and that the traditional accounting practices were no longer appropriate, which led them deliberating about an approach that gave a “fast but comprehensive view of the business” (Kaplan & Norton, 1992, p. 1). This important management tool (Epstein & Manzoni, 1998) helped to revolutionize traditional thinking about performance metrics: by going beyond conventional measures of financial performance, it has given a better understanding of how businesses are going. The introduction of the BSC provided a methodology that translates strategy into a reliable set of measures (Kaplan & Norton, 1993). According to these two authors (1997), the BSC materializes a company's vision and strategy through a map of objectives and key performance indicators, organized according to four different perspectives, that provide answers to four critical questions: (i) financial perspective (how do we look to shareholders?); (ii) customer perspective

(how do customers see us?); (iii) internal processes perspective (what must we excel at?); and (iv) learning and growth perspective (how can we continue to improve and create value?). Another important feature of this performance management system is the articulation of linkages between measures and objectives (Banker et al., 2000). Kaplan and Norton developed the BSC to reinforce traditional financial measures with operating measures oriented toward activities related to the four perspectives already stated here. Financial measures, such as return on investment, operating profit by business unit and market share can be useful to reveal whether the company's strategy implementation and execution are contributing to significant improvements in the bottom line. This perspective focuses on financial performance of an organization. The financial situation of an organization is important for managers to monitor. It is relevant to notice that financial performance usually results from the performance in the other three perspectives. Customer measures, such as customer retention and percent of sales from new customers aim to evaluate the company's performance from the customer perspective. Internal process measures aim to identify core competencies, recognize strengths and weaknesses, and make improvements. Typical KPIs include time to process customer returns in retail stores, manufacturing cycle time and manufacturing unit cost. Since the path for any business success changes with time, it is indispensable to develop new products and new processes. Learning and growth perspective focuses on the intangible drivers of future performance and its goals and measures are often broken down in the following three pillars: Human Capital (related to skills, talent and knowledge); Information Capital (related to databases, information systems, networks, and technology infrastructure); and also Organization Capital (related to firm's culture, leadership, employee alignment, teamwork and knowledge management). Summing up, this perspective focuses on factors that facilitate continuous improvement. These perspectives

“are not necessarily comprehensive but should represent the critical success factors necessary for continued organizational success or, minimally, survival. Thus, there is intended to be a close link between the business unit strategy adopted and the performance measures selected.” (Otley, 1999, p. 12). Moreover, the BSC must be composed by two types of measures: lead measures, whose purpose is to allow the company to reach targets of the lag measures, the other type where the main measures are financial performance indicators. In order to build this strategic management tool, the first step that has to be taken should be clarify and translate the vision and strategy, followed by the communication of the strategy along all the organization, after having set the objectives and measures and linked the reward system to those measures. Then, targets must be defined and resources have to be allocated and strategic initiatives have to be aligned. After all steps, managers must provide feedback to facilitate strategy reformulation and to make improvements not so difficult (Nørreklit, 2000). According to Niven (2006), after the development of the BSC at the corporate level of a company, the concept should be cascaded downward to business units and support directions. Hence, these units need to build their own dashboards to implement the strategy communicated by the top managers. A complete and efficient implementation of this methodology is only possible by cascading down to the individual level. This allows the possibility for each employee to have a panorama on his or her paper in strategy implementation, understanding the firm strategy will make the employees more capable to use performance measures to guide their decisions and everyday actions (Frigo & Krumwiede, 2000). For each individual measure, a strategic implementation goal is established. By using measurements throughout an organization, it is possible to implement strategy and achieve synergies (Bessire & Baker, 2005). Along the last decades, many academics have contributed to the development of this methodology. According to Perkins et al. (2014), there are several

types of BSC. The first type arose from the primordial idea of a valuable strategic tool to the institution of targets and initiatives and then to the implementation of causality and strategic connections between the four perspectives. In fact, the introduction of the causality between the objectives is the biggest innovation brought by this tool and it is why BSC changed from being a Performance Measurement Tool to a Performance Management Tool. What distinguishes the second type of the BSC is the introduction of a visual framework connecting strategy and everyday actions. Furthermore, it was also changed by the renewed role of intangible assets and how they can be translated into tangible assets. Fundamentally, the second type is known as Strategy Map. The third type of BSC is the only that was not developed by the two creators. The concept of Destination Statement is the main contribution of this version. The Destination Statement states what the company should look like at a predetermined date. Therefore, the last Balanced Scorecard is considerably simpler as it embraces just two measures: outcomes, instead of financial and customer perspectives, and activities, which replace learning and growth and internal processes perspectives. But why is the BSC so valuable? As already noted, the BSC is a framework that is used in companies for being a tool that brings in a unique framework four different perspectives on a company's performance, connecting them with elements of company's competitive agenda: "The Balanced Scorecard is (...) powerful tool by which senior managers can be encouraged to address the fundamental issue of effectively deploying an organization's strategic intent" (Otley, 1999, p. 15). It enhances the establishment of links between strategic objectives and performance measures and "measuring the achievement of the components of the strategic plan the organization has espoused" (*ibid*). Moreover, it is also a mean to communicate the company's strategy and align its strategic objectives across all the employees in order for the whole company to go in the direction pointed by its strategy. Another point that has

to be considered is the kind of approach adopted by managers to evaluate performance of their employees is expected to influence the intensiveness of BSC usage and kind of BSC usage. There are three distinct types of evaluation styles: these types include whether managers have a flexible or a less flexible evaluation style to evaluate their subordinates; whether they value financial or non-financial performance measures more strongly; and whether they value quantitative or qualitative performance measures more strongly. Therefore, those individuals that are more willing to adopt innovative systems and new information sources will be expected to use the BSC more often (Wiersma, 2009). Despite of BSC being considered an interesting strategic management/performance system, it has its own drawbacks and many unfavorable opinions have arisen as well. The real existence of cause-effect relationships between the four perspectives and measures is not clear (Nørreklit, 2000). The argument is significant, since Kaplan & Norton, in 1992, affirm the existence of cause-effect relationships as the main distinction between the BSC and other performance measurement instruments. In addition, Nørreklit (2000) provides examples such as the relationship between customer satisfaction and profitability, referring that there is no clear evidence to demonstrate that a causal relation between the different perspectives exists, but that they are only interdependent, which means that the link is not unilateral. Also, several doubts are presented about the reliability of the BSC as a strategic control system, due to the impracticality to consider all the stakeholder's concerns. In fact, balancing of various stakeholders' interests, besides the shareholders' ones is one of the main problems when implementing the BSC (Heidi et al., 2010). There are two approaches of defining objectives can be identified within a firm: (i) shareholders-centric, with a single end; and (ii) stakeholders-centric, which is quite different since it gives attention to every stakeholders. The stakeholders-centric approach leads to new managerial challenges, as some objectives might be irreconcilable. To deal with

incompatible objectives, two approaches might be followed: prioritizing (give more weight to some objectives), or satisficing (trying to attribute equal importance for each of them). Management Control Systems are used to help aligning strategy, objectives and people conducts, which require to know all of them. The researchers explain three manners in which BSC allows balancing. First of all, it can encompass many objectives as relevant as others, giving importance to all the stakeholders, which contradicts the beliefs of Kaplan & Norton (2005) that the financial performance is the final goal, and the remaining perspectives presented in the BSC are only means to achieve that. The second approach allows managers to identify when conflicts might arise to tackle them earlier and more effectively, by distinguishing between final and support objectives. Finally, BSC shows how improvements in one key performance indicator affect others. Nevertheless, this fact doesn't imply that a cause-effect truly exists between the two measures, but at least a logical relation does, so a manager acts in a certain direction because in his point of view, it is the best path to reach his goal. The findings from the three approaches addressed are quite clear: BSC can be considered a "thinking device" and that "balance is a temporal constellation" (Sundin et al., 2010, p. 213). In Nørreklit's opinion, BSC is extremely inflexible and it does not cope with external shocks that may impede the company from reaching its strategic objectives. Moreover, Kaplan and Norton did not consider any probable problem related to the implementation of this strategic management tool, especially in what concerns to the motivation of collaborators in embracing the BSC approach. According to Ax and Bjørnenak (2005), "initially, the idea may meet resistance, for example in the form of an unwillingness to make organizational changes or of theoretical objections from academics. Barriers to diffusion can assume the shape of lack of resources or cultural/linguistic obstacles" (p. 7). Nørreklit (2003) also states the lack of analysis towards the internal commitment of collaborators, mentioning

that objectives alignment within the companies is taken for granted. In the implementation phase, another aspect that matters is the communication with collaborators, in order to explain what actions lead to the achievement of intended results. One more drawback is related to the time dimension, once BSC does not take into account that different initiatives and actions can hold different time span to achieve some outcomes (Johanson et al., 2006). For this reason, an ongoing monitoring is required. Nørreklit (2003) also states the BSC can be a solution to fix old problems but without any theoretical foundation. According to him, the papers published by Kaplan and Norton just intend to catch reader's attention by using an eloquent writing composed by metaphors, hyperboles and powerful statements. Nørreklit affirms the authors' sayings are not supported by significant arguments, but just by their reputation and university brand. Moreover, two sources of failure of the BSC should be considered: the design and the process (Rompho, 2011). Looking at the first source of failure, it can be pointed out that too few measures in each perspective might lead to its failure to get a balance between leading and lagging indicators or between financial and non-financial indicators. Also, too many indicators without identifying the relevant ones might lead the company to lose focus and be unable to find linkage between indicators. Besides that, failure of measures chosen to translate the company's strategy, which happens when a company tries to input all its KPIs into each perspective without screening to select only those measures linked to its strategy. When this occurs, the BSC becomes worthless because the company's strategy is not translated into action. Despite that, Rompho states process failures as the most common. Accordingly, some of these failures are: lack of senior management commitment; overmuch the long development process; hiring inexperienced consultants; and the non-availability of time and resources. In fact, time and resources are essential to a successful implementation and without them, the BSC would be considered worthless

(Tenhunen et al., 2001). BSC has been implemented mainly in the private sector. However, in the last decade the public sector has been involved in a context of change. For example, decentralization, performance measurement and greater concern about final results are some of the main changes. To provide public sector managers useful tools, the adoption of what is considered to be private sector management approaches and techniques is becoming commonplace (Northcott & Taulapapa, 2012). Following this reasoning, the BSC is considered by many researchers as an adequate methodology to manage performance in public sector. However, there are still some concerns, once the causes for BSC success or failure in the public companies have not been well examined. Only some researchers have identified critical factors to the successful implementation of BSC's in public entities (e.g. Radnor & Lovell, 2003; Yeung & Connell, 2006). The main success factors identified among the studies carried out about this matter were: top management commitment; employee buy-in; convenient training; clear organizational strategy and goals; links to incentive schemes; and the appropriate resourcing. Non-success implementation factors were also identified: inadequate information systems; insufficient sponsorship of the BSC by senior managers; poor linkage to employee rewards; uncertainty about the choice of suitable KPI's; and organizational resistance to change (Northcott & Taulapapa, 2012).

III. METHODOLOGY

This WP was made up of a directed research with internship using qualitative research carried out between 4th of September (2017) and the 20th of May (2018) in the Planning and Management Direction (DPC), with the purpose of giving a response to the question: "What is the best BSC to comply with the strategic guideline – Internationalization of INCM's activity, enhancing the use of the installed capacity?". This guideline was created

by the Executive Board (2017), to diversify the sources of revenue of the company and to mitigate the dependency on the State's Business Sector. The researcher assumed a "participant role" (Ryan et al., 2002), once he was the designer of the intended BSC and at the same time is working at the company. DPC is the organizational unit that has as a mission to advise the Executive Board on the definition of the company's strategic guidelines, supporting all stakeholders in the decision-making process, as well as ensure the maintenance and evolution of the quality management system and of the certifications. The main responsibilities of DPC are to support the Executive Board in the strategic planning of the company and in the monitoring of the institutional performance; to prepare and to disclose all the relevant information for the decision-making process of the stakeholders (as the managers of each organic unit within the company); to ensure the organizational alignment of INCM; and finally, to identify, to propose, to implement and to maintain the certification processes considered as strategic for the company. Besides that, DPC has to prepare and send the management report and accounts of the company to the shareholder. Acting as a participant was essential in order to get valuable information for this WP, due to the involvement in the everyday life of INCM. Interventionist research can be considered part of a family of methodological approaches to doing field research in accounting and management (Jönsson & Lukka, 2006). "The aim of intervention research is to meld theory and practice together, two kinds of imprints that express an entity of use and of explanation as the two sides of the same coin. If the use and the explanation match, we can both use the object in practice and provide a reason for how and why it is used; that is, we have made a full epistemological contribution" (Westin & Roberts, 2010, p. 4). Thus, "there are two primary sources available to create meaning and knowledge of practice. The first source is a construct originating from the concrete experiences of practice, while the second source is as an abstract

conceptualization expressed by the spoken or written word. Taken together they constitute the input of understanding, which could be used to produce concrete practical insights. Knowledge and experiences are enriched and adapted in practice by human interaction and communication. The dynamic world of interventionist research implies continuous participation in doing research in practice, to be at the center of events to learn and know ‘what is going on’” (Westin & Roberts, 2010, p. 5). Summing up, an interventionist researcher not only conducts interviews and analyze archives, but also conducts his empirical research *in vivo* (Jönsson & Lukka, 2006). Hence, as an interventionist research demands, the intern conducted both primary and secondary research. The researcher gathered data from various types of sources so that he could triangulate data (Ryan et al., 2002): (i) participated in meetings, (ii) produced support documents, (iii) did semi-structured interviews and conducted informal debates with managers and senior technicians, (iv) visited the main business units, (v) observed written documents from the company (among them, Annual Business Plan 2017, Planning Schedule of 2017, Strategic Plan 2017-2019, Training Plan 2016, the Innovation Framework Project – Final Report 2015, Internal Risk Report and the PowerPoint Presentation “Planning better to increase customer loyalty”). All these sources allowed the researcher to get an in-depth view on the company. The participant was involved in two meetings: the first with the manager of the Planning and Management Direction, on the 14th of September, with the purpose of getting to know what was intended to do during the internship (among other tasks, to create the BSC related to the work project and to create a dashboard with macro objectives to support the Executive Board in the decision-making process). The second occurred on the 20th of October, with the Integrated Management System Promotor, where he explained the importance of the certifications in the public tender context and gave an idea about how the Integrated Management

System works and the correspondent drawbacks. By producing the reports for the business units explaining the results of the customers' satisfaction surveys, the researcher became aware of the main complaints presented by the customers and also about which type of improvements could be done. Besides that, to develop a dashboard with several objectives assumed also a relevant role, once it exposed the need to improve the information systems within the company, such as the one used for this task (SAP). Furthermore, a set of semi-structured note-recorded interviews were made (see Appendix 1), with managers of the following departments (DPC, DCM, DCP, DPI), as well as several informal debates with senior technicians from different departments (DPC, DCM, Security Printing unit). In totality, there were six interviews amounting to ten hours. The guide visits to the Mint and Security Printing were another source of evidence. It is also important to refer that an interventionist research gets the opportunity to examine what really matter to employees, their commitment and how they work, as compared to what they might say or do hypothetically (Eden & Huxham, 1996). Hence, these two guide visits were important in order to get an idea about the real strengths, weaknesses, opportunities and threats of the most relevant business units - Mint and Security Printing (see Appendix 2). The analysis of the INCM written documents was considered by the researcher a pertinent method, once it not only helped him to triangulate data to design the BSC, but also made it easier to speed up the researcher integration process in the firm. Moreover, the final BSC proposed by the researcher was then reviewed during the last interview with DPC manager, when critical feedback and recommendations were provided.

IV. EMPIRICAL STUDY

INCM is a state owned public company, with more than a hundred years in business, and as a mission it has to develop, produce and supply goods and services that require a level of embedded security sufficient to guarantee their authenticity and reliability. Over the years of business activity, INCM and its forebears have built up a set of values that have stood the test of time and are now an integral part of its identity (see Appendix 3). Moreover, INCM wants to be recognized both nationally and internationally as a leading supplier of the quality products and services that society really needs. To be recognized at this level, the company employs the latest technology and knowhow and meticulously tailor this to the client's specific needs. As a result of collaborators' work, people, goods and services can be identified with the utmost certainty and accuracy. As an outward-looking entity, INCM also promote Portuguese language and culture. The organizational model was adjusted to many new challenges assumed by the INCM, existing, as the main organic areas, four business units - Security Printing, Mint, Publications and Assay - that by their nature are the planning, management and operation of the service/product life cycle; support functions that provide transversal services; and functions of corporate center that provide services of planning and development of the organization (see Appendix 4). It is of major importance to state that there are three products (Portuguese Citizen Card, Portuguese Passports and Currency), representing about half of the revenues divided by three main clients (Direção-Geral do Tesouro e Finanças (DGTF), Instituto dos Registos e Notariado (IRN), Serviço de Estrangeiros e Fronteiras (SEF)). Although the INCM is a company with a privileged relationship with the State, it is important to consider the possibility of changing this condition at any time, and the company must therefore direct attention and effort to minimize its potential effects through a strategy of sustainable diversification of its customers. This diversification must

be accompanied by measures to preserve its strategic customers, reinforcing the orientation, namely of its commercial organization, the processes of innovation and relationship management, to increase customer satisfaction. The company has several certifications (e.g., ISO 27001 – Information Security Management System, for the production of the Tachograph; ISO 9001 – Quality Management System; ISO 14001 Environmental Management System) that enables INCM to succeed in more public tenders than previously without these certifications. Other certifications such as MasterCard Certification, Visa Certification and MasterCard Quality Management program are also a significant contribute to increase revenues in the Security Printing unit, once they allow INCM to produce and personalize bank cards. Although, INCM aims to get some more certifications (NP ISO 14298 – Security Printing Production Management System; NP 4469 - Social Responsibility Management System; European Foundation for Quality Management (EFQM) Excellence Model), to reinforce its capabilities and its competitiveness. From the Executive Board, and based on the results of the strategy analysis carried out previously and presented in the Strategic Plan 2017-2019, it is considered pertinent to continue to pursue several strategic guidelines, which are intended to ensure the sustainability of the company's activity and creation of value in long term (see Appendix 5). Innovation of supply is one of the strategic guidelines pursued by the company. In fact, annually, 1% of the company's turnover is affected in R&D projects. INCM has been engaged in the promotion and implementation of several initiatives and measures aimed at the continuous integration of research, development and innovation in their products, processes, business models or organizational methods, with a view to the security of citizens and companies. To this end, INCM currently has a collaborative network of external partners - Innovation Network - with the purpose of transfer the results of the scientific system to its productive fabric. It has also instituted

the "INCM Innovation Award - New Products and Services", to select and to reward innovative ideas that allow the creation of new products and services of the company. Another situation that the company is aware of is the simplification and dematerialization processes that support relations between citizens, businesses and the State; this will lead to the very residual termination or use of traditional physical media, such as printed matter, validation stamps and other documents, which have been very important in the activity of the company still a few years ago, releasing important margins. In addition to the innovation of the company's offer, it is necessary to reformulate the internal organization and functioning model, improving the process of dialogue with stakeholders, to maximize the value that is unique to each client or strategic partner. In this sense, the Commercial Development Program was started in 2016, aiming to adjust INCM's organization to the new reality of its market. It is therefore important to continue implementing this program, promoting the reorganization of its commercial area in order to strengthen its internal capacities to manage customers, products and contracts, taking care of the different market segments in which it operates. In this context, it is important to create specific capacities for the management of its strategic clients, developing in the resources allocated the culture and the specific competences related to the corresponding organizations and the industries in which they are inserted. It is also important to improve the articulation of the commercial area with the other areas involved in the customer response (Production, Logistics, etc.), streamlining the communication procedures between the areas, in order to allow a more consistent and timely response. To this end, the INCM should increase its intervention in the value chain through the development of its competencies or, alternatively, find business partners that allow the client to offer a "turnkey" product/service. Finally, it is worth highlighting the review of the mechanisms for measuring customer satisfaction, also taking into account the characteristics of its

different markets, in order to simplify and streamline them, but above all to introduce a complementary process directed at its main clients, greater interaction and depth. Internationalization of INCM's activities, enhancing the use of installed capacity is the strategic guideline that is under approach during this interventionist case study. In addition to improving customer satisfaction by offering turn-key solutions, strategic partnerships with partners on a global scale also enhance the delivery of winning proposals internationally. These partnerships, in addition to being sources of revenue, can also be an advantage in strengthening the brand in the international context. In the coming years, the company will also need to develop them with other companies with a global presence (which has already allowed it, for example, to access Moldova's passport printing) to facilitate entry into other markets where INCM does not operate or has poor expression, thus enhancing the use of installed capacity in the company. The presence of the INCM in other geographies, with security printing products and currencies is already a reality (see Appendix 6). However, for the sustainability of the business in the long term, this effort should be intensified, especially in view of the opportunities for public tendering for security documents, and a more frequent presence in the market of the Community of Portuguese Speaking Countries (CPLP), where the company holds a strong brand and recognized competence in products and services such as the production of currency, official documents and graphic values. It should be noted that, for example, in the subject of money, installed production capacity against current currency needs for Portugal, remains an opportunity to conquer other markets (e.g., currency production for Timor in 2014 and 2015). Promoting penetration in new international markets will require, on the one hand, INCM to ensure the most frequent commercial presence and, on the other, to overcome the difficulties posed by other competitors that dominate the entire value chain, from the production of the raw material to the production of the product,

either through better contractual mechanisms and/or stock management, or through the creation of similar capacity. Affirming the brand also means to get to know and make known the value that it delivers to its customers. The organization of the international conference “eID Conference” in Maputo, was one of the company's goals in 2016, which allowed for a greater approximation and understanding of the benefits that its clients, national and international (especially the CPLP countries), have achieved with the products and services, but also fostered the exchange of experiences between them, in a different way of knowing their products. INCM should persist in its endeavor to study its reputation and recognition in the markets it operates; it should also, continue developing efforts to improve the planning of actions with an impact at this level, namely through the holding of an international conference and/or thematic workshops to be held with clients and national and international partners under the "Value for Security" brand. The fact that the activity of the firm is not only dependent on the European economic conjuncture, but also on the consolidation measures associated with the control of public national debt and the constraints that have been applied to the companies that belong to the State Business Sector, turns to be imperative to increase internal efficiency by optimizing the organization processes (namely, the management, production and logistics processes). So, it is still the INCM's objective to continue the investments that have become necessary for the reduction of operational risk, as well as to the industrial refitting, which proves to be critical for the improvement of internal efficiency. To do so, the Kaizen Program, created in 2014, helps to analyze the organization processes in the Security Printing and in the Mint unit, suggesting improvement actions, implementing proposed actions and approved posteriorly. After all the phases, its impact is evaluated. Regarding the participatory culture, integrating all the factory community in the improvement processes is important, given the continuous improvement is a task attributed to all the collaborators

within the organization. Develop employees and give them knowledge about the Kaizen philosophy is also something that must not be ignored, in order to making them more proactive and capable of taking the initiative of looking continuously to improvement opportunities in their workplaces. By valuing the workers' opinion, taking them into consideration, a more motivated workforce will be created. The Kaizen program not only contributes to a more cooperative environment, but also for a better teamwork within the company. Moreover, this program leads to a more committed workforce, incentivizing the creation of a cultural change that generates more value added and aims for excellence. However, to ensure the success of the Kaizen program is mandatory the existence of a cooperation between all the participants. The Executive Board, the managers of each department and the headships must ensure the collaborators training in what concerns the concepts, tools and techniques applied in the Kaizen context. Create operational teams to implement the right tools is also a duty of management. Between other duties, they should facilitate and provide time, during the work schedule, for the activities related to the program, promoting them. Showing concern and commitment of INCM to the success of the Kaizen program is another relevant factor to achieve continuous improvements. The remaining employees also have an important role in order to achieve efficiency, by showing motivation to learn more about the concepts, tools, techniques applied in this context and by promoting efforts to creatively implement the several Kaizen tools. As stated above, employee development is something that the Executive Board is aware of. Reinforcing skills and a culture of merit, and responsibility is a priority. In fact, the company's results rely significantly on the involvement of employees, thereby being paramount the creation of development programs, which while constrained by the policies of wage and cost containment, will produce important effects at the level of employees' motivation and performance. The adequacy of the function to employees' profile, the

physical conditions of work, but especially the recognition of merit, may be of particular importance in the workers' empowerment. On the other hand, vocational training also asserts itself as a privileged management tool at the disposal of the INCM, providing employees with the development of their knowledge and skills, which must then be put at the company's service, enhancing the achievement of better results. In this context, and in line with the organization's strategy, the INCM must have a training plan that meets the challenges and needs of the company, guaranteeing the knowledge and acquisition of specific competencies that differentiate the organization. There are several fields covered by the training plan for 2018 (behavioral/leadership, organizational development, finance/accounting, law, safety and hygiene, information systems, technical training), as well as four training modalities in which each action will be developed: internal training (that will be achieved in partnership with an external engineer or trainer, exclusively for a group of INCM); external training (that will be carried out by an external entity or trainer, which participate a worker, or a small group of INCM participants, including, in a vast group of professionals from other organizations); internal training with internal trainers (that will be ministered by an internal trainer for an exclusive group of INCM participants) and also e-learning (training carried out in a distance format, on the computer of the workplace of each worker, or in computers' available for that effect). The focus is on new training strategies through e-learning, enhancing the comprehensiveness of key training actions that mirror the values of the INCM. Professional training allows for continuous learning. Regardless of the training modality (on-job training, internal training, external training, e-learning), it will enhance the professional performance of employees, thereby contributing to the modernization of the company and to the affirmation of their values to the community, partners and customers. Among the different types of training, the customer service training to DCM that aims to develop customer

service and management techniques that are result-oriented using customer service and cross-selling techniques (taking into account the conclusions taken from the project “mystery” client, where the company’s customer service are under analysis), can be very useful to strengthen the company’s presence in the international markets, as well as the marketing training to endow participants with competencies and in the area of marketing and sales techniques. To promote the evolution and modernization of internal processes, increasing efficiency, it is fundamental the full implementation of the Performance Management System (see Appendix 7). The system, created in 2016, allows to align workforce with the strategic objectives of the company, by defining the behavioral competencies required to each functional profile. This system has been identified as a structural need by the collaborators in several satisfaction surveys and it is pointed as indispensable to differentiate distinct performances. The researcher observed in the Strategic Plan (PE), the strategic objectives for the all company are defined by the Executive Board from the guidelines of the shareholder (Parpública), and are set for the triennium. Then, each organic unit defines its own operational objectives that can hence be used to define individual or team objectives and as a way to meet the strategic ones. The several organic units send a proposal to DPC, between September and November. After this stage, the proposals are discussed between DPC manager individually with each unit to assess whether it makes sense or not. Moreover, taking into account the monitoring previous done, it is evaluated whether objectives are adequate or not. Among the chosen ones, some are used to evaluate the performance of the collaborators of each area, meaning that, according to their function, collaborators have a certain percentage of strategic, operating, and individual objectives. For example, team workers have a high percentage of individual objectives, a little of the operating objectives, and a residual of strategic objectives; unlike team workers, managers that are responsible for the teams, are

more evaluated for the operating objectives. When considering the Executive Board, the strategic objectives are the most relevant for the performance evaluation. Another important role in the internationalization process of the company, is the work made by DPI. This department provides services of planning and development of the organization, increasing its competitiveness capabilities, by creating a set of original programs and projects related to new products and internal processes, as it can be verified in projects such as the “Electronic Complaint Book”, “Digital Mobile Key”, “Creation of the “Card3Dface”, among others. Summing up the main findings from the empirical research, a SWOT analysis was done by the researcher (see Appendix 8).

V. BALANCED SCORECARD

As a result from the evidence collected, the BSC was built. Overall, fourteen objectives were set and are presented in the Strategy Map (Figure 1). Objectives number 1, 2 and 3 should be used to measure performance in all organic units across the company. Objectives number 4, 5, 7, 8, 9, 10, 11 and 12 should be used to measure performance in the Commercial and Marketing Direction. Objective number 6 should be used by the Security Printing and Mint units while, objectives number 13 and 14 must be a result from the accomplishment of the objectives previously referred. Besides that, to reach the objectives, nineteen KPIs were chosen along with the intended targets (Figure 2). The chosen targets and their relative weight were defined after discussion with the DPC manager, where observation of past data presented in written documents such as the Annual Business Plan 2017, the Strategic Plan 2017-2019, and also in excel files (that contain forecasts) were important to set accurate estimates. Also, the KPI's will be measured on an annual basis, once otherwise it would not be possible due to the high workload in the DPC. In the future, all data will come from the software SAP, used to

manage INCM's operations. Also, the analysis done to the INCM's documentation (Innovation Framework Project – Final Report 2015, Internal Risk Report and the PowerPoint Presentation “Planning better to increase customer loyalty”, the guide visits to the Security Printing and Mint units and of being involved in the day-to-day work of the company, and once again after discussion with the DPC manager, a set of strategic initiatives were considered to help in the execution of the objectives (see Appendix 9)).

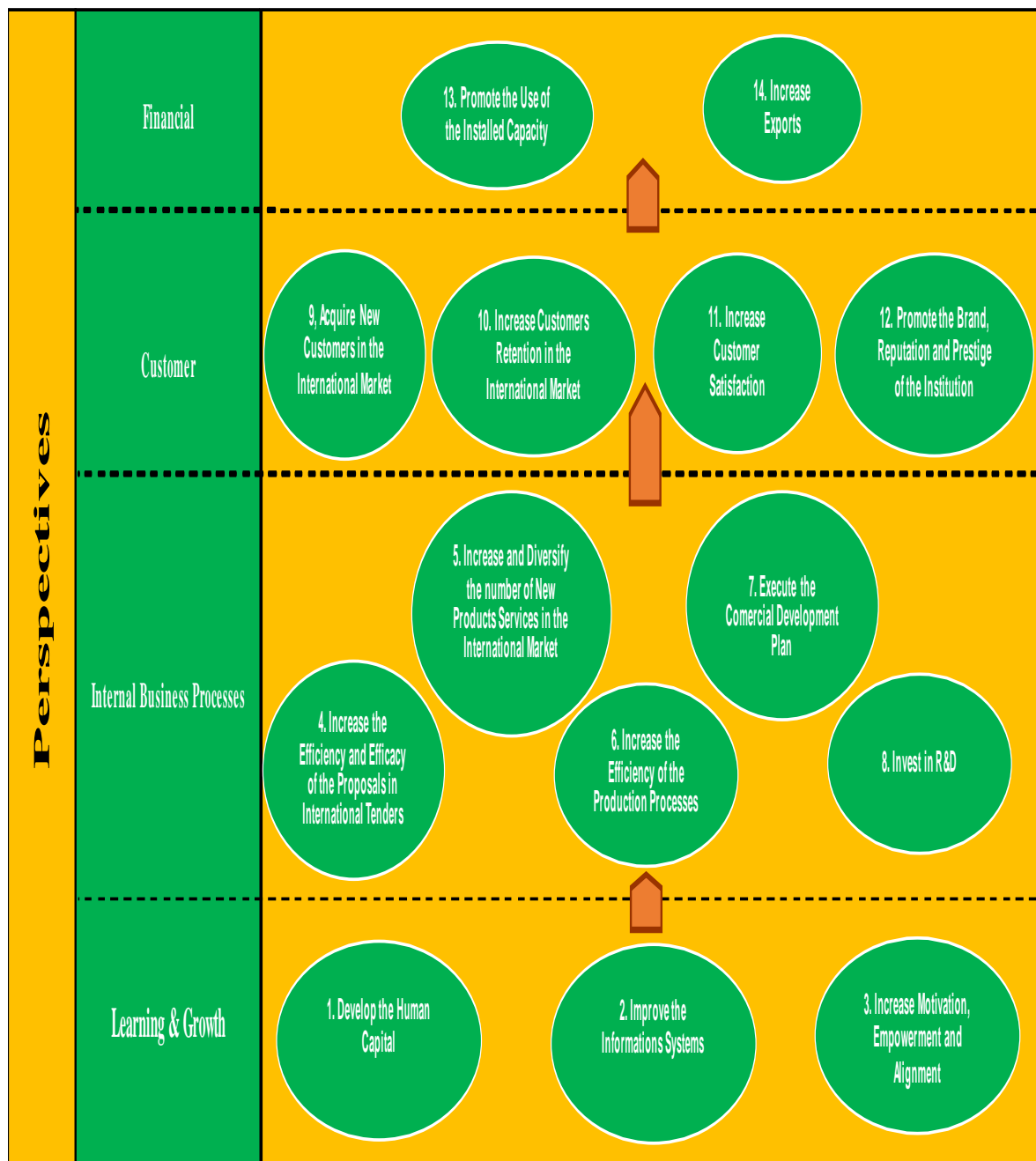


Figure 1 – Strategy Map with the fourteen objectives defined by the researcher.

Objectives		Key Performance Indicators	Periodicity	Polarity	Actual Value	Target 2018	Target 2019	Target 2020	Indicator Weight
14	14.1	Δ% of Revenues from Exports	A	(+)	66%	27%	1%	56%	100%
	13.2	Return On Investment	A	(+)	NA	15%	20%	20%	60%
13	13.1	Asset Utilization Rate (Revenues from Exports/Total Assets used for international businesses)	A	(+)	NA	55%	60%	60%	40%
12	12.2	Number of Participations in International Events	A	(+)	5	7	10	12	40%
	12.1	International Reputation Index	A	(+)	NA	8	8	9	60%
11	11.1	% of International Customers that are willing to recommend the Products/Services to other Potential Customers	A	(+)	40%	50%	60%	70%	100%
10	10.1	Δ% of Revenues from Existing Customers	A	(+)	2%	3%	3%	3%	100%
9	9.1	Δ% of Revenues from New Customers	A	(+)	3%	6%	7%	8%	100%
8	8.1	% of the Planned Capital Effectively Invested	A	(+)	44%	70%	80%	90%	100%
7	7.1	% of Planned Actions Effectively Realized	A	(+)	71%	75%	85%	90%	100%
6	6.1	Gross Margin (Outputs/Inputs)	A	(+)	9%	16%	18%	20%	100%
5	5.1	Number of New Products/Services in the International Market	A	(+)	2	1	1	1	100%
4	4.1	% of Public Tenders Won	A	(+)	56%	60%	63%	70%	70%
	3.3	% of Workers who achieve Personal Goals	A	(-)	NA	90%	90%	90%	60%
3	3.2	Number of Suggested Improvements per Worker	A	(+)	NA	50	50	50	10%
	3.1	Number of Suggestions Implemented per Worker	A	(+)	NA	10	12	15	30%
2	2.1	Informatization Rate (Number of Processes Informatized/Number of Processes)	A	(+)	50%	60%	70%	80%	100%
1	1.2	% of Participations in the Training Plan	A	(+)	95%	100%	100%	100%	70%
	1.1	% of Hours of Training Planned Realized	A	(+)	60%	60%	65%	70%	30%

Figure 2 – Objective numbers, KPIs, Periodicity, Polarity, Actual Value, Intended Targets, Indicator Weight. Note: “A” stands for “Annual” and “NA” for “Not Applicable”. Some actual values are not presented because the Information Systems are not ready to provide them yet.

VI. CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

The end result of the WP would have been slightly different if the researcher had access to quantitative data with the purpose of better defining the intended targets, which did not happen in some KPIs (3.1; 3.2; 3.3; 12.1; 13.1; and 13.2). Data collection for past performance, in order to get more precise targets for measures was not easy as IT systems were not designed to provide it. An interesting suggestion could be the improvement of the IT systems to provide needed data on time, to support every organizational unit in the planning and controlling of their operations. However, the analysis required to build the BSC was useful not only to provide the Planning and Management Direction with new measures to evaluate several organic units, in order to pursue the fulfillment of the strategic guideline approached, but also to better analyze which are the bigger strengths, weaknesses, threats and opportunities of the main business units (Mint and Security Printing), and of the company as a whole. Moreover, the inadequate information systems, the inadequate sponsorship of the benefits of the BSC by upper-level managers and the organizational resistance to change are considered the main limitations by the researcher, in a possible implementation of the BSC. The building process also gave evidence that with the BSC comes a change in some of the critical processes guiding the organization (Niven, 2006), leading an opportunity to start studying themes such as the limitations caused by the Public Procurement Code in the human resources and stock management. Hence, an interventionist research should also be considered to help solving these problems. For the future, another important suggestion would be more research about the causality relationship between the KPI's and the strategic initiatives proposed by the intern. Summing up, the implementation of the BSC for INCM can be a worthwhile contribution for measuring the company's performance in order to reach the strategic guideline "Internationalization of INCM's activity, enhancing the use of the installed

capacity”. By being implemented in the right way, the BSC will help the company to speed up its business processes, improve its performance and thus, will create a huge value for the company in the next years.

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APPENDIX

Appendix 1: Conducted Interviews.

Interview Number	Date	Place	Interviewee	Length	Additional Information
1	25th of September	DPI	DPI Manager	60 minutes	The researcher received some advises about the methodology that he should use in this work project.
2	10th of October	DCM	Manager of the Innovation Section	180 minutes	The innovation section was founded only one year ago, which means that it is in an embryonic stage. However, this interview was very useful once the responsible for this section explained how the innovation network works. She also talked about some ongoing projects related to new products created for internal and external use, to reduce costs and also to enhance the sales strategy. Finally, she spoke about the workshop "Planning better to increase customer loyalty" and Innovation Framework Project – Final Report.
3	27th of October	DCM	DCM Manager	105 minutes	The manager explained how the public tenders work and some strategies used to win them. He also reveal the international markets where the INCM has already a strong presence and suggested some potential markets for the future.
4	27th of October	DCP	DCP Manager	15 minutes	This interview had as main purpose to know more about the limitations imposed by the public procurement code (CCP). To overcome this problem, the creation of a team to suggest and help the Public Ministry in a possible modification of the CCP should be considered.
5	3rd of November	DCM	DCM Manager	120 minutes	The purpose was to know more about new products created and also about the improvement opportunities that must be done in order to build strong relationships with the customers. In the second interview with the DCM manager, INCM's rebranding was the main topic addressed. The manager spoke about the digital platforms and how the communication with customers, business partners and suppliers is done. The problems related to the online store and to the social media platforms were exposed. Hence, a platform B2B of data collection would be useful to help in the rebranding process.
6	9th of May	DPC	DPC Manager	120 minutes	Feedback on the proposed Balanced Scorecard, including discussion about the chosen objectives, KPIs, targets and initiatives.

Appendix 2: SWOT Analysis (Security Printing and Mint).

STRENGTHS	WEAKNESSES
Human resources with know how of the processes in which they are involved Installed capacity available to participate in international competitions Responsible, interested and responsible human resources Active participation in international groups with influence in matters related to currency Certifications of Quality, Environment and Human Resources	Lack of human resources to respond to calls for large quantities of currencies from other countries Dependence on a small number of products Competitive difficulties in the "open" market, due to the peripheral location and dependence of suppliers of raw material, not dominating delivery times nor obtaining competitive prices Impossibility to control the variables that determine the demand for circulation coins Factory's layout Limitations in the management of human resources caused by the Procurement Code Relative lack of market culture
OPPORTUNITIES	THREATS
Gold coins continue to be seen as an investment by some buyers Collector coin emissions, or integration into international emission plans, can boost exports Raising awareness of sustainability and social responsibility Implement a new design in the coinage process Improve production processes	Electronic payment methods (via mobile phones) may threaten the use of higher value coins The European Commission's strategy to take over centralized control over currencies and possible tightening of collection rules Decrease and aging of the collector market Competition between European mints due to overcapacity available, smashing prices in open currency tenders

Table 1 – SWOT (Mint).

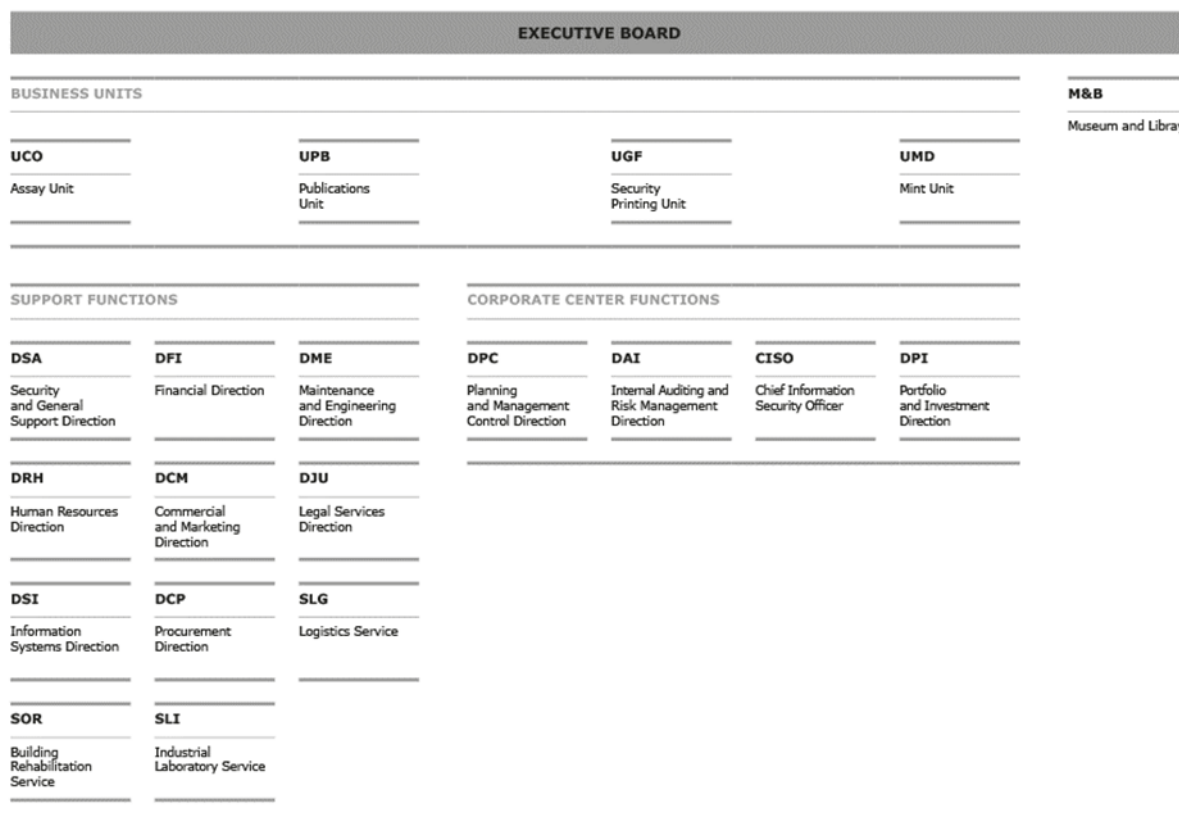
STRENGTHS	WEAKNESSES
<p>More favorable negotiating capacity with the target market (Public Administration), compared to the competition</p> <p>Positioning towards the State that allows the attribution of the production of several products and services</p> <p>Image associated with security, prestige and technological capability</p> <p>Privileged position with the authorities or official entities of African countries of Portuguese language</p> <p>Mastering the technologies of graphic production, personalization and dispatch of security documents and identification</p> <p>Ability to innovate</p>	<p>Cost structure unfavorable to an open and competitive market</p> <p>Significant reduction of traditional products (with higher margins)</p> <p>Progressive loss of state supplier status under the use of the powers of authority under the Public Procurement Code and the increasing need for transparency in public administration processes</p> <p>Successive delays in the process of entering into production of the personalization of bank cards</p> <p>Need to increase technical and detailed knowledge of the electronic components (chips) of the products</p> <p>Strong dependence on a small number of clients and especially the State, in the broad sense</p> <p>Strong dependence on a small number of products</p> <p>Lack of flexibility in using extra work at peak height to meet more demanding delivery times, which often makes it difficult to meet deadlines</p>
OPPORTUNITIES	THREATS
<p>Replacement of current products by others of higher added value</p> <p>Growing concern about security and authentication of documents, people / citizens and goods worldwide</p> <p>Growing market concern for incorporating product information systems</p> <p>Internationalization in products that are INCM's exclusive property</p> <p>Partnerships with competence centers for the development of products and services and technologically advanced processes</p> <p>Tendency of outsourcing in the Public Administration in areas related to the issuance of documents</p> <p>Market segment of authentication and legitimization stamps with some potential for growth.</p> <p>Improve Production Processes</p>	<p>Trend of abandonment of physical media as evidence of certification or qualification, in favor of electronic validation processes, supported in database</p> <p>Constant need for technological evolution</p> <p>Dematerialization of INCM's exclusive forms</p> <p>Liberalization of the traditional "exclusive" market segment</p> <p>National competition with increasing commercial / technical capacity and lower structure costs</p> <p>Foreign competition with strong technical and commercial capacity</p> <p>Strong competition in the banking card market</p>

Table 2 – SWOT (Security Printing).

Appendix 3: Mission, Vision and Values of the company (Source: Adapted from INCM's Website).

MISSION
To Create, produce and deliver goods and services focused on customer, and on innovative security standards.
VISION
To be recognized at national and international level as a leader in security products and services essential to society and as a promoter of the Portuguese language and culture.
VALUES
1 - Sustainable Development 2 - Business Culture 3 - Responsibility towards your employees 4 - Customer Satisfaction 5 - Citizen Service 6 - Continuous Improvement 7 - Network Innovation 8 - Excellence

Appendix 4: INCM's Organigram (Source: Strategic Plan 2017-2019).



Appendix 5: Strategic Guidelines (Source: Adapted from Strategic Plan 2017-2019).

STRATEGIC GUIDELINES	
1	Innovation of Supply, increasing the impact on the security of the citizens and businesses.
2	Build strong relationships with customers and strategic partners, increasing their satisfaction.
3	Internationalization of the INCM's activities, enhancing the use of the installed capacity.
4	Increase Brand Awareness and Promote INCM's Reputation.
5	Increase the impact and the acknowledgment of INCM's social intervention.
6	Increase the INCM's efficiency, by optimizing the organization and its management, productive and logistic processes.
7	Develop the INCM's Human Capital, throughout a meritocracy, responsabilization and an adequate reinforcement of the collaborators' skills.

Appendix 6: Origin of INCM's main International Customers (Source: Adapted from an Excel internal document of INCM).

Origin of INCM's Main International Customers	Product/Service
Georgia	Circulation Coins
Moldova	Passport
Angola	Passport
Cape Verde	Electronic Passport, National Identity Card
Guinea-Bissau	Tax Recipe Book
Mozambique	Census
São Tomé and Príncipe	Passport, Driving License, Registration Certificates
Germany	Passport
Estonia	Collector Coins
Spain	Circulation Coins
Finland	Passport

Appendix 7: Performance Measurement System (Source: Adapted from INCM's Intranet).

	Strategic Objectives	Business Unit / Direction Objectives	Individual Objectives	Skills
Upper-level managers	25%	45%	0%	30%
Lower-level managers	15%	35%	0%	50%
Senior Technicians	5%	15%	15%	65%
Administrative / Operational Workers	5%	20%	0%	75%

Appendix 8: INCM's SWOT Analysis made by the researcher.

STRENGTHS	WEAKNESSES
<p>Long-term relationships with various strategic clients and institutions in several countries</p> <p>Know How in the Security Printing and Mint units</p> <p>Certifications and credentials, including in the financial sector</p> <p>Strong presence in the market of the African Portuguese Speaking Countries</p> <p>Capacity to create new products</p> <p>Positioning towards the State that allows the attribution of the production of several products and services</p> <p>Image associated with security, prestige and technological capability (Reputation/Trustmark)</p> <p>More favorable negotiating capacity with the target market (Public Administration), compared to the competition</p> <p>Manufacturing capacity available to participate in international competitions (Security Printing and Mint unit)</p> <p>Mastering the technologies of graphic production, personalization and dispatch of security documents and identification</p> <p>Certifications and credentials, including in the financial sector</p>	<p>Brand associated with public activity</p> <p>Obligations of unprofitable public service activities</p> <p>Strong dependence on a small number of customers</p> <p>Strong dependence on a small number of products (Security Printing)</p> <p>Factory's Layout (Mint)</p> <p>Digital Communication Strategy</p> <p>Cost structure unfavorable to an open and competitive market (Security Printing)</p> <p>Significant reduction of traditional products with higher margins (Security Printing)</p> <p>Successive delays in the process of entering into production of the personalization of bank cards (Security Printing)</p> <p>Need to increase technical and detailed knowledge of the electronic components (chips) of the products (Security Printing)</p> <p>Information Systems of the company</p> <p>Conditioning for the companies of the State Business Sector. Human Resources constraints (recruiting, remuneration and careers)</p> <p>Lack of flexibility in using extra work at peak height to meet more demanding delivery times, which often makes it difficult to meet deadlines (Security Printing)</p> <p>Competitive difficulties in the "open" market, due to the peripheral location and dependence of suppliers of raw material, not dominating delivery times nor obtaining competitive prices (Mint)</p>
OPPORTUNITIES	THREATS
<p>Growing concern about security and authentication worldwide</p> <p>Diversification of new products and customers</p> <p>Acquisition of new certifications</p> <p>Build stronger relationships with strategic partners (customers, suppliers and business partners)</p> <p>Improve internal processes around the company, mainly in the DCM, Security Printing, Mint</p> <p>Promote INCM's products and services through International Conferences, Workshops and Guide Visits to the INCM's facilities</p> <p>Implement a new design in the coinage process</p> <p>Partnerships with competence centers for the development of products and services and technologically advanced processes</p> <p>Collective coin emissions, or integration into international emission plans, can boost exports</p> <p>Investments in progress in administrative modernization</p> <p>Opening of the shareholder for investment in innovation</p>	<p>Strong competition in the banking card market</p> <p>Dematerialization of INCM's exclusive forms</p> <p>Decrease and aging of the collector market</p> <p>Liberalization of the traditional "exclusive" market segment (Security Printing)</p> <p>Electronic payment methods (via mobile phones) may threaten the use of higher value coins</p> <p>Foreign competition with strong technical and commercial capacity (Security Printing)</p> <p>The European Commission's strategy to take over centralized control over currencies and possible tightening of collection rules</p> <p>Competition between European mints due to overcapacity available, smashing prices in open currency tenders</p>

Appendix 9: Strategic Initiatives proposed by the researcher.

		Objectives													
		Learning and Growth			Internal Business Processes					Customer				Financial	
Strategic Initiatives		1 - Develop the Human Capital	2 -Improve the Informations Systems	3 - Increase Motivation, Empowerment and alignment	4 - Increase the efficiency and efficacy of the proposals in Public Tenders	5 - Increase and Diversify the number of new Products/Services in the Market	6 - Increase the Production Processes Efficiency	7 - Execute the Commercial Development Plan	8 - Invest in R&D	9 - Acquire New Customers in the International Market	10 - Retain Actual Customers in the International Market	11 - Increase Customer Satisfaction	12 - Promote the Brand, Reputation and Prestige of the Institution	13 - Promote the Use of the Installed Capacity	14 - Increase Exports
1	Promote the hiring of Consulting Services			X	X			X	X						
2	Promote Guide Visits to INCM's Facilities			X				X		X	X	X	X		
3	Create a Documentary Management System		X												
4	Create a Project Management System		X												
5	Acquisition of Certifications (ISO 14298 - Security Printing Production Management System ; NP 4469 - Social Responsibility Management System)				X		X								
6	Maintenance of the existent Certifications				X		X								
7	Maintenance of the "Mystery Client" Project									X	X	X			
8	Maintenance of the "Focus Group" Project									X	X	X			
9	Maintenance of the Kaizen Program						X								
10	Workshop about the Performance Measurement System			X											
11	Create an online platform on the intranet for suggestions			X											
12	Review Call Centers Proceedings										X	X			
13	Expand the Innovation Team and spread members around the Several Departments								X						
14	Establish New Strategic Partnerships (Suppliers, Business Partners, R&D Partners)				X		X		X						
15	Suggest Modifications for the CCP and support the Public Ministry in this Process				X										
16	Acquisition of New Machinery				X		X								
17	Implement a New Design in the Coinage Process					X				X	X				
18	Adoption of New Proceedings to improve the Purchasing Process, specially about the Suppliers Management, by making more Long Term Contracts				X										
19	Interdepartamental Meetings to share information and ideas about particular activity topics	X	X	X			X								
20	Creation of a Mentoring Program for the New Workers	X													
21	Creation of Technical Reports about the Relevant Information Collected in International Trips, Visits, Meetings, Workshops and/or Conferences				X		X	X							
22	Increase Consortium in Public Tenders				X										
23	Build Strong Relationships in Non-Developed Countries (Latin America and Portuguese-Speaking African Countries)									X	X			X	X
24	Creation of Unique Security Elements for the Identification Documents (e.g. Products made by Hidrocarbonate Paper)				X	X				X	X				
25	Organize Conferences with the purpose of explaining the benefits of the INCM's Products and Services									X	X	X	X		
26	Update the Digital Platforms							X							
27	Implement a New International Marketing Strategy Activity							X							
28	Creation of a Platform B2B for the purpose of Collecting Data					X	X	X		X	X				
29	Workshops about the Importance of the Security and Autentication of Documents, Goods and Services									X	X	X	X		
30	Allocate 1% INCM's Turnover in R&D Projects					X			X						
31	Maintenance of the INCM Innovation Award - New Products and Services					X			X						
32	Create a Reward System aligned with the Performance Measurement System			X											
33	Promote the Training Plan (Customer Service, Sales and Marketing)	X						X							
34	Creation of a Workers Satisfaction Survey			X											
35	Participation in International Events												X		
36	Creation of a Career Plan	X		X											
37	Redesign Factory's Layout						X								